

## **STAFF REPORT**

### **REGULATION 10: STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES**

#### **EXECUTIVE SUMMARY**

This is a proposal to amend Regulation 10: Standards of Performance for New Stationary Sources by updating references to recently promulgated federal standards. The adoption by reference of updates to the federal New Source Performance Standards (NSPS) allows the District to enforce these standards where applicable and allows the US EPA to delegate primary enforcement authority to the District. Air District adoption of the standards does not affect the standards by making them either more or less stringent. The NSPS that have been promulgated by the US EPA since the last amendment to Regulation 10, affect the following types of sources:

- Industrial, Commercial and Institutional Steam Generating Units
- Hospital/Medical/Infectious Waste Incinerators
- Steel Plant Electric Arc Furnaces and Decarburization Vessels
- Municipal Solid Waste Landfills

Affected sources must comply with the standards nationwide, regardless of District adoption. Consequently, there are no economic or environmental impacts associated with this proposal. Impacts on District resources are expected to be insignificant. Staff recommend adoption of the proposed revisions.

#### **BACKGROUND**

Amendments to Regulation 10 are being proposed in order to incorporate changes made by the United States Environmental Protection Agency (EPA) to New Source Performance Standards (NSPS) regulations. This is a biennial process last accomplished October 8, 1997. The Clean Air Act requires that EPA establish NSPS for significant new and modified sources. The NSPS are requirements throughout the country, regardless of the attainment status of the area in which sources are being built. This serves to protect areas in cleaner regions from air quality degradation, as well as provides standards for non-attainment areas without stringent local programs. The new federal standards and revisions to existing standards are periodically promulgated into Title 40 of the Code of Federal Regulations, Part 60 (40 CFR 60).

The EPA has encouraged states and districts to adopt the NSPS regulations by reference. Adoption by reference is a cost-effective procedure because the District is not required to rewrite the EPA promulgation and EPA need not perform a line-by-line review of the District regulation for consistency. Adoption by the Board of Directors gives the District the authority to enforce these standards for applicable sources, and enables EPA to delegate that authority to the District. Typically, there are only a few sources subject to changes in these standards in the District, because the majority of these standards affect

only specific kinds of sources and only very large sources constructed or modified after a certain date. Applicable New Source Performance Standards are, however, required to be individually listed in Title V permit conditions.

The proposed amendments to Regulation 10 reflect NSPS changes promulgated in Title 40 between June 17, 1997 (the date of the last proposal) and August 31, 1999. Once adopted, the amendments will grant the District implementation and enforcement authority within the Bay Area pursuant to the federal standards. No socioeconomic or environmental impacts are expected due to adoption of this authority by the District.

## **DESCRIPTION OF CHANGES TO NSPS REGULATIONS**

**Subpart Da - Performance Standards for Electric Utility Steam Generating Units for which Construction is Commenced After September 18, 1978.** The amendments revise Oxides of Nitrogen (NO<sub>x</sub>) standards for electric utility boilers of at least 250 million Btu/hr heat input capacity. The NO<sub>x</sub> emission limit has been reduced to 200 nanograms per Joule (1.6 lb NO<sub>x</sub> per megawatt-hour) *gross energy output* for any type fuel. Previous standards varied based on fuel types and heat input. This change in the format of the standards will, in EPA's belief, contribute to the goal of pollution prevention by encouraging the use of energy efficient technologies to minimize the generation of emissions. EPA also believes the change to a single standard regardless of fuel used will encourage the use of cleaner burning fuels without limiting control options available. In addition, EPA is accepting electronic reporting for this and subpart Db.

This revision does not make the standard more stringent than the Best Available Retrofit Control Technology (BARCT) standards in Bay Area Regulation 9, Rule 11: Nitrogen Oxides and Carbon Monoxide from Utility Electric Power Generating Boilers.

**Subpart Db - Performance Standards for Industrial - Commercial - Institutional Steam Generating Units.** Amendments to this subpart were promulgated along with amendments to Subpart Da. The new, more stringent standards in both subparts affect only units constructed, reconstructed or modified after July 9, 1997, although the previous standards in this subpart remain in effect for units built or modified after June 19, 1984 but before July 9, 1997. This subpart applies to steam generating boilers of at least 100 million Btu/hr heat input capacity. The NO<sub>x</sub> emission limit for these boilers has been reduced to 87 nanograms NO<sub>x</sub>/Joule (0.20 lb/MMBtu) heat input from oil, natural gas, coal or any mixture of fossil fuels.

For units built after June 19, 1984, Bay Area rules are more stringent than the new federal standards. These units would be subject to the existing BARCT standards in BAAQMD Regulation 9, Rule 8: Nitrogen Oxides and Carbon Monoxide from Industrial, Institutional and Commercial Boilers, Steam Generators and Process Heaters. Any boiler built or modified after July 9, 1997 would have NO<sub>x</sub> limits set by Best Available Control

Technology (BACT) standards by Regulation 2, Rule 2: New Source Review, which would be significantly more stringent than the EPA standards in Subpart Da.

**Subpart Dc - Small Industrial, Commercial and Institutional Steam Generating Units.** This amendment adds sulfur dioxide (SO<sub>2</sub>) emission limits for coal fired boilers. There are no affected facilities in the District.

**Subpart Ec - Performance Standards for Hospital/Medical/Infectious Waste Incinerators For Which Construction is Commenced after June 20, 1996.** This amendment controls facilities that incinerate medical and infectious waste and sets emission limits for a variety of pollutants: particulate matter, carbon monoxide, dioxins and furans, hydrogen chloride, sulfur dioxide, oxides of nitrogen, lead, cadmium and mercury. Medical or infectious waste includes pathological waste but also includes cultures and stocks of infectious biologicals; other human or animal waste removed during surgery or autopsy and its containers; blood, blood products and items saturated with blood; syringes, scalpels, vials, needles and culture dishes; including from pharmaceutical testing; isolation wastes; and discarded, unused sharps (needles, scalpels, etc).

When the NSPS for Hospital/Medical/Infectious Waste Incinerators was promulgated, EPA also promulgated Subpart Ce - Emission Guidelines and Compliance Times for Hospital/Medical/Infectious Waste Incinerators. Subpart Ce, the Emission Guidelines, affects incinerators that were built before June 20, 1996 that burn medical or infectious waste. There is one facility affected by this subpart in the Bay Area, the Integrated Environmental Systems (IES) facility in Oakland. The federal emission guidelines require each state to develop a plan that will control emissions from the subject incinerators to a level at least as stringent as the standards in the guidelines. This is different from the NSPS in that the guidelines set standards for facilities that are not new sources, but does so indirectly, by requiring each state to devise a regulatory effort or plan to control the sources and then seek approval for that plan from EPA.

If states do not devise a plan, or devise a plan that is not approved by EPA, EPA is required under existing Subpart Ce to create, for those states, a federal plan that reflects the requirements in the emission guideline. The California Air Resources Board has not devised a state plan, in part because there is only one affected source in the state, IES. IES already is controlled to as stringent a level as is technologically possible by the conditions in their District operating permit. The permit requirements are significantly more stringent than the federal plan would require. In addition, hearings are currently under way regarding IES' Title V permit. However, because only a handful of states have submitted plans, a federal plan applicable to the remaining states, including California, was proposed in the Federal Register of July 6, 1999.

The federal plan, when finalized, will affect IES. However, the only ramification of the promulgation will be that reports of compliance with federal plan conditions will have to be submitted to the EPA Administrator in addition to any reports required by the District.

Subpart Ce, although a part of 40 CFR 60, is not proposed to be included in this update to District Regulation 10, because the requirements of this subpart are directed at states (and by extension, districts) not at facilities. In addition, Subparts C: Emission Guidelines and Compliance Times, Subpart Ca (reserved), Subpart Cb: Emission Guidelines and Compliance Times for Municipal Waste Combustors, Subpart Cc: Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills, and Subpart Cd: Emission Guidelines and Compliance Times for Sulfuric Acid Production Plants are proposed to be deleted from Regulation 10 for the same reason.

**Subpart X - Performance Standards for the Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities.** This subpart controls fluoride emissions from granular triple superphosphate (GTSP) storage facilities. Fluoride emissions occur as part of the curing process of this fertilizer. The amendments clarify that the subpart applies only to storage of fresh GTSP while curing, not to cured GTSP. There are no affected facilities in the District.

**Subpart AA - Performance Standards for Steel Plants: Electric Arc Furnaces Constructed After October 21, 1974 and On or Before August 17, 1983.** This amendment does not change any of the particulate emission standards for electric arc furnaces subject to this subpart. Pressure monitoring sensors that work in conjunction with opacity monitors have a tendency to clog, due to the high temperatures and excessive dust above electric arc furnaces. The amendments allow daily visual opacity readings as an alternative to the existing pressure and opacity monitoring requirements. Also, minor corrections have been made to definitions.

**Subpart AAa - Performance Standards for Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 17, 1983.** This subpart provides somewhat stricter standards for particulate emissions for newer electric arc furnaces than those addressed in Subpart AA. The amendments, regarding monitoring alternatives, are exactly the same as to Subpart AA, above.

**Subpart WWW - Performance Standards for Municipal Solid Waste Landfills.** This subpart was amended twice, on June 16, 1998 and again on February 24, 1999. This subpart, originally promulgated in 1996, applies to landfills that were constructed after May 31, 1991. There are four facilities subject to this standard in the District: Ox Mountain Sanitary Landfill in Half Moon Bay, Redwood Sanitary Landfill in Novato, Tri-Cities Recycling in Fremont, and Keller Canyon Landfill in Pittsburg.

The standards in this NSPS are also being incorporated into Regulation 8, Rule 34: Solid Waste Disposal Sites for the subject facilities. Incorporation into Rule 34 of this subpart

and also of the emission standards and monitoring requirements in Subpart Cc: Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills will allow the District to greatly simplify the Title V permitting process for twenty affected facilities. These amendments to Subpart WWW correct and clarify the applicability section and clarify definitions and reporting requirements.

### **ECONOMIC IMPACTS**

District staff have not identified any economic impacts associated with the proposed amendments to Regulation 10. The sources subject to NSPS regulations, regardless of whether the District has emissions standards that are more stringent, are still subject to all the provisions of the federal law. Frequently, NSPS regulations set specific monitoring, recordkeeping and reporting requirements for sources, and sometime certain training or certification requirements for source operators. These requirements must be complied with regardless of District adoption. As the EPA delegates enforcement authority for these standards to the District, the District may become the recipient of some reports in lieu of EPA; however, this does not constitute an additional economic burden for the affected source.

California Health and Safety Code, Section 40728.5 requires an analysis of the socioeconomic impacts of rule amendments adopted that “will significantly affect air quality or emissions limitations.” This requirement of Section 40728.5 is not applicable to the District adoption of these amendments, because the affected sources are legally obligated to comply with the NSPS regulations regardless of this proposed District action.

California Health and Safety Code, Section 40920.6 requires an assessment of incremental cost effectiveness for one or more potential control options which achieve the emission reduction objectives of the proposed amendment. The proposed amendments adopt existing federal standards for the purposes of delegation of enforcement authority. Because there are no identifiable alternatives that could achieve the same objective, Section 40920.6 does not apply.

### **ENVIRONMENTAL IMPACTS**

Adoption of the proposed amendments will not have any environmental impact on affected facilities, either positively or negatively, because the affected facilities are legally required to comply with the standards regardless of this District action. It is expected that some facilities will have to add to or change their air pollution control equipment, particularly at solid waste disposal sites subject to Subpart WWW. However, for landfills subject to Subpart WWW, the provisions are already incorporated into District Regulation 8, Rule 34, and all potential environmental impacts have already been discussed in association with those amendments adopted by the District Board on October 7, 1999. Further, the requirement by which any additional control equipment would have to be installed is the NSPS, not the proposed District adoption of the NSPS by reference.

Therefore, the proposed amendments to Regulation 10 are administrative in nature, and it can be seen with certainty that the amendments have no environmental impacts. The District has determined that these amendments are exempt from the provisions of the California Environmental Quality Act pursuant to State CEQA Guidelines, Section 15061, subd. (b)(3). The District intends to file a Notice of Exemption pursuant to State CEQA Guidelines, Section 15062.

### **REGULATORY IMPACTS**

Under California Health and Safety Code, Section 40727.2, upon adoption, amendment or repeal of air district regulations, a comparison of existing federal and district rules that affect the same equipment or source type is required. However, Section 40727.2 (g) states, "If a district's proposed new or amended rule or regulation does not impose a new emission limit or standard, or impose new or more stringent monitoring, reporting, or recordkeeping requirements, or if the proposed new or amended rule or regulation is a verbatim adoption or incorporation by reference of a federal New Source Performance Standard adopted pursuant to Section 111 of the Clean Air Act (U.S.C. 7411) or an airborne toxic control measure adopted by the state board pursuant to Section 39666, a district may elect to comply with subdivision 40727.2 (a) by preparing an alternative analysis demonstrating that the proposed new or amended rule or regulation falls within one or more of the categories specified in this subdivision."

This amendment is clearly an adoption by reference of existing federal new source performance standards. As stated herein, the District will gain enforcement authority by adoption of these amendments, but the proposal does not alter either existing district rules that may be more or less stringent than the standards, nor does it alter the federal standards to make them either more or less stringent. The federal standards exist as mandates for affected sources regardless of District action, so adoption by the District does not alter the requirements for affected facilities.

### **RULE DEVELOPMENT HISTORY**

The District first adopted federal new source performance standards on March 17, 1982. At that time, the federal standards were re-written and re-formatted to be consistent with other District rules and regulations. Separate rules in Regulation 10 were added for each new promulgation. However, given the time spent by District staff with an increasing number of promulgations, and that EPA did not always approve the District written version, on April 19, 1989, the District board approved deletion of the entire text of Regulation 10 and adopted all updated federal new source performance standards by reference. Regulation 10 was subsequently amended in 1990, 1991 and biennially thereafter.

Staff notified sources identified as being potentially affected by the proposed revisions and requested comments in lieu of scheduling a public workshop. Staff received one comment, identified in the "Comments and Responses" section, below.

### **DISTRICT STAFF IMPACTS**

The proposed adoption of the NSPS is anticipated to have very little impact on District staff resources. When new or modified sources are permitted, they are required to be evaluated for the applicability of these federal standards, and the standards are then reflected in either District or Title V permit conditions. Because only a minority of new sources are subject to NSPS, the additional work takes very little time.

### **COMMENTS AND RESPONSES**

On December 7, 1999, staff received one verbal comment from Sam Hammonds, Exxon refinery, stating that subparts GGG and QQQ were superseded by MACT requirements found in 40 CFR 63, although no reference to the exemption was found in the NSPS subparts. The purpose of the supercession is to eliminate duplicative administrative requirements relating to the submission of similar or identical records and reports for the same units. Because the BAAQMD had adopted these subparts by reference, but did not reference the MACT exemption, he felt he was obligated to submit the reports to the BAAQMD to comply with the NSPS, and identical reports to the EPA to comply with the MACT. Staff agree with Mr. Hammonds, and have added language to the introduction to Regulation 10 specifically exempting sources from the NSPS requirements where they are provided exemptions in federal law.

### **CONCLUSION**

The proposed amendments to BAAQMD Regulation 10 adopt by reference revisions to existing subparts of federal Standards of Performance for New Stationary Sources. These federal regulations are in effect regardless of Bay Area action. Adoption will grant the District authority to enforce the standards. Following adoption, EPA will be requested to delegate primary enforcement authority to the District. Adoption of these amendments will not impose any new standards on affected industry, nor will it result in any economic impacts.

Pursuant to the California Health and Safety Code, Section 40727, regulatory amendments must meet findings of necessity, authority, clarity, consistency, non-duplication, and reference. Staff make the following findings regarding the proposed amendments:

Necessary for the District to implement and enforce the NSPS to new and modified stationary sources of air pollution;

Authorized by the California Health and Safety Code Sections 40000, 40001, 40702, 40 CFR Part 60, and the Clean Air Act, Section 111(c)(1);

Clear, in that the amendments adopt by reference federal standards and test methods found in 40 CFR 60, and are written in a manner understandable to the regulated, affected industry and persons;

Consistent with other District rules, and not in conflict with any state or federal law;

Non-duplicative of other statutes, rules or regulation; and

Written to provide the proper references to the applicable federal regulations.

The proposed amendments to Regulation 10 have met all legal noticing requirements. Staff recommend adoption of the proposed amendments.

DB:db